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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,978	04/24/2007	Geoffrey Gerard Hayes	921-001-002	4150
86012 VLP Law Grou	7590 01/20/201 ⁻ p LLP	EXAMINER		
555 Bryant Stre Suite 820		BROWE, DAVID		
Palo Alto, CA 9	94301		ART UNIT	PAPER NUMBER
			1617	
			NOTIFICATION DATE	DELIVERY MODE
			01/20/2012	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@vlplawgroup.com

Office Action Summary		Application No.	Application No. Applicant(s)				
		10/588,978	HAYES ET AL.				
		Examiner	Art Unit				
		DAVID BROWE	1617				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR R CHEVER IS LONGER, FROM THE MAILIN resions of time may be available under the provisions of 37 C SIX (6) MONTHS from the mailing date of this communication period for reply is specified above, the maximum statutory per re to reply within the set or extended period for reply will, by reply received by the Office later than three months after the ed patent term adjustment. See 37 CFR 1.704(b).	IG DATE OF THIS COMMUN FR 1.136(a). In no event, however, may a on, period will apply and will expire SIX (6) MC statute, cause the application to become A	ICATION. The reply be timely filed WITHS from the mailing date of this case. ABANDONED (35 U.S.C. § 133).				
Status							
1) 又	Responsive to communication(s) filed on	19 September 2011.					
2a)		This action is non-final.					
′=	An election was made by the applicant in response to a restriction requirement set forth during the interview on						
9,	the restriction requirement and election have been incorporated into this action.						
4)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
•//	closed in accordance with the practice un	<u>.</u>	·				
Dienositi	ion of Claims	asi zxpano dadyo, 1000 or	31 11, 100 01012101				
•	Claim(s) <u>138-140,142-162 and 164-260</u> is	· · · ·	n.				
	5a) Of the above claim(s) <u>165-260</u> is/are withdrawn from consideration.						
· -	Claim(s) is/are allowed.						
	☑ Claim(s) <u>138-140,142-162 and 164</u> is/are rejected.						
·	Claim(s) is/are objected to.						
9)	Claim(s) are subject to restriction and/or election requirement.						
Applicati	on Papers						
10) The specification is objected to by the Examiner.							
11)🛛	11) ☐ The drawing(s) filed on 10 August 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
12) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority u	ınder 35 U.S.C. § 119						
·							
13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:							
مرار	,,						
	 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 						
	3. Copies of the certified copies of the priority documents have been received in this National Stage						
* 0	application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	t(s)						
	e of References Cited (PTO-892)		Summary (PTO-413)				
	e of Draftsperson's Patent Drawing Review (PTO-94		(s)/Mail Date				
	mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	6) Other:	Informal Patent Application				
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DETAILED ACTION

Request for Continued Examination

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office Action has been withdrawn pursuant to 37 CFR 1.114. Applicants' amendment and submission filed on September 19, 2011, that includes a response to the Final Office Action mailed January 21, 2011, has been entered. Claims 1-137, 141, and 163 have been canceled; and no claims have been amended or newly added. Claims 190-210 stand withdrawn. Claims 138-140, 142-162, 164-189, and 211-260 are currently under examination.

Claim Rejections - 35 USC § 102(b)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 138-140, 142-144, 151, 153, 165-170, 177, 179, 211-216, 223, 225, 236-241, 248, and 250 are rejected under 35 U.S.C. 102(b) as being anticipated by Wright, IV *et al.* (U.S. Patent Application Pub. No. 2003/0044458).

Wright, IV *et al.* disclose a controlled-release formulation having a rubbery matrix comprising a neutral poly(ethyl acrylate, methyl methacrylate) copolymer and an active agent, wherein the controlled release formulation can comprise melt-extruded

multiparticulates or granulates (Pg. 1, secs. 0002; Pg. 3, secs. 0030, 0033, 0036-0038; Pg. 4, secs. 0039-0043; Pg. 6, secs. 0065-0067; Pg. 7, sec. 0074; Pg. 8, secs. 0082-0088; Pg. 9, secs. 0089, 0092, 0094). The neutral poly(ethyl acrylate, methyl methacrylate) copolymer is Eudragit NE 30 D (Pg. 9, sec. 0089). The active agent is oxycodone or a pharmaceutically acceptable salt thereof (Pg. 3, sec. 0037); or can be another opioid, a stimulant, a barbiturate, an anti-depressant, a dissociative anesthetic, or combinations thereof (Pg. 3, secs. 0033, 0036-0038; Pg. 4, secs. 0039-0043).

Oxycodone can be in combination with naltrexone or another opioid antagonist (Pg. 1, secs. 0002, 0007-0009; Pg. 2, sec. 0029; Pg. 3, sec. 0037; Pg. 4, sec. 0046; Pg. 9, sec. 0098; Pg. 10, secs. 0101, 0104; Pg. 11, sec. 0115). The controlled-release matrix includes one or a combination of ethylcellulose, a water-insoluble ammonium methacrylate copolymer, and at least one other release-modifying polymer (Pg. 7, sec. 0071; Pg. 8, secs. 0084-0086, 0088; Pg. 9, sec. 0089).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.

- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 138-140, 142-162, 164-189 and 211-260 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright, IV *et al.* (U.S. Patent Application Pub. No. 2003/0044458), in view of Oshlack *et al.* (U.S. Patent No. 5,958,452) and Oshlack *et al.* (U.S. Patent Application Pub. No. 2002/0010127).

Applicant Claims

Applicants claim a controlled-release formulation having a rubbery matrix comprising a neutral poly(ethyl acrylate, methyl methacrylate) copolymer and an active agent, wherein the formulation comprises melt-extruded multi-particulates or granulates. The active agent is oxycodone or a pharmaceutically acceptable salt thereof; or can be another opioid, a stimulant, a barbiturate, an anti-depressant, a dissociative anesthetic, or combinations thereof. Oxycodone is present in an amount from 5-160 mg, and can be in combination with naltrexone or another opioid antagonist in individual or separate

multi-particulates. The controlled-release matrix includes one or a combination of ethylcellulose, a water-insoluble ammonium methacrylate copolymer, and at least one other release-modifying polymer. The matrix can further include a plasticizer and a bulking agent. The controlled-release unit dose is formulated for once or twice a day dosing; and contains up to 60 wt% active agent, 15-50 wt% neutral poly(ethyl acrylate, methyl methacrylate) copolymer, 10-50 wt% ethylcellulose, 5-60 wt% insoluble ammonium methacrylate copolymer, and 7.5-20 wt% plasticizer. Controlled-release unit doses containing oxycodone can be specifically formulated to exhibit desired *in vitro* oxycodone dissolution rates; as assessed by standard USP Paddle or Basket Methods at 100 rpm, 900 ml aqueous buffer, pH 1.2 or 1.6-7.2, and 37°C; and to deliver the peak plasma level of oxycodone *in vivo* at 2-17 hours after administration of the dosage form.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Wright, IV *et al.* disclose a controlled-release formulation having a rubbery matrix comprising a neutral poly(ethyl acrylate, methyl methacrylate) copolymer and an active agent, wherein the formulation comprises melt-extruded multi-particulates or granulates. (Pg. 1, secs. 0002; Pg. 3, secs. 0030, 0033, 0036-0038; Pg. 4, secs. 0039-0043; Pg. 6, secs. 0065-0067; Pg. 7, sec. 0074; Pg. 8, secs. 0082-0088; Pg. 9, secs. 0089, 0092, 0094). The neutral poly(ethyl acrylate, methyl methacrylate) copolymer is Eudragit NE 30 D (Pg. 9, sec. 0089). The active agent is oxycodone or a pharmaceutically acceptable salt thereof (Pg. 3, sec. 0037); or can be another opioid, a stimulant, a barbiturate, an anti-depressant, a dissociative anesthetic, or combinations thereof (Pg. 3, secs. 0033, 0036-0038; Pg. 4, secs. 0039-0043). Oxycodone is present in an amount

from 5-160 mg, and can be in combination with naltrexone or another opioid antagonist in individual or separate multi-particulates (Pg. 1, secs. 0002, 0007-0009; Pg. 2, sec. 0029; Pg. 3, sec. 0037; Pg. 4, sec. 0046; Pg. 9, sec. 0098; Pg. 10, secs. 0101, 0104; Pg. 11, sec. 0115). The controlled-release matrix includes one or a combination of ethylcellulose, a water-insoluble ammonium methacrylate copolymer, and at least one other release-modifying polymer (Pg. 7, sec. 0071; Pg. 8, secs. 0084-0086, 0088; Pg. 9, sec. 0089). The controlled-release unit dose affords tamper-resistance (Pg. 1, sec. 0029; Pg. 10, sec. 0100); and can contain up to 60 wt% active agent, 15-50 wt% neutral poly(ethyl acrylate, methyl methacrylate) copolymer, 10-50 wt% ethylcellulose, 5-60 wt% insoluble ammonium methacrylate copolymer, and 7.5-20 wt% plasticizer (Pg. 8, secs. 0085-0086, 0088; Pg. 9, sec. 0089; Pg. 11, sec. 0115).

Oshlack *et al.* (U.S. Patent No. 5,958,452) disclose a controlled-release matrix formulation comprising a pharmaceutically acceptable acrylic-methacrylic acid copolymer and an active agent (Col. 3, Ins. 43-44, 61-65; Col. 4, Ins. 5-6, 10-11, 17-20, 31-33; Col. 6, Ins. 50-53; Col. 8, Ins. 36-39, 43-44, 47-49, 53-56). The active agent can be any water-soluble or water-insoluble drug, and include opioid analgesics, stimulants, hypnotics (which includes barbiturates and dissociative anesthetics), psychotropics (which includes anti-depressants), and sedatives (Col. 6, Ins. 50-53, 56-57; Col. 7, Ins. 5-8, 9-11, 25). In preferred embodiments, the opioid analgesic is oxycodone in an amount from about 5-400 mg (Col. 7, Ins. 35-37, 54-56). The controlled-release matrix can include at least one other release-modifying polymer, such as an alkyl cellulose, particularly ethyl cellulose, or a water-insoluble ammonium methacrylate copolymer

(Col. 8, Ins. 36-59). The matrix can further include suitable quantities, up to about 50 wt%, of other materials such as plasticizers, lubricants, diluents, binders, and granulating aids, such as bulking agents (Col. 9, Ins. 40-52). The most suitable plasticizer is based on its ability to lower the glass transition temperature (Tg) of the polymer (Col. 6, Ins. 30-34), which would impart a rubbery consistency to the controlledrelease unit dose matrix in ambient conditions. The matrix may also include retardant materials, such as water-insoluble wax-like thermoplastic substances possibly mixed with one or more wax-like thermoplastic substances that are sparingly water-permeable (Col. 8, Ins. 66-67; Col. 9, Ins. 1-3), which are known in the art to confer a resistance to in vitro extraction of the active agent with common solvents, such as alcohol (Col. 4, Ins. 11-16). The controlled-release unit dose can be obtained by melt-extrusion, and formulated as multi-particulate dosage forms suited for once (every 12 hours) or twice (every 24 hours) a day dosing (Col. 3, Ins. 50-53, 61-67; Col. 4, Ins. 1-3, 5-6, 10, 39-41, 50-53; Col. 11, Ins. 61-63). Controlled-release unit doses containing oxycodone can be specifically formulated to exhibit desired in vitro oxycodone dissolution rates; as assessed by standard USP Paddle or Basket Methods at 100 rpm, 900 ml aqueous buffer, pH 1.2 or 1.6-7.2, and 37°C (Col. 9, Ins. 44-46; Col. 11, Ins. 33-48, 61-67; Col. 12, Ins. 1-7, 13-16, 22-27); and to deliver the peak plasma level of oxycodone in vivo at 2-17 hours after administration of the dosage form (Col. 12, Ins. 9-10, 15-17).

Oshlack *et al.* (U.S. Patent Application Pub. No. 2002/0010127) disclose a controlled-release matrix formulation comprising a methacrylic acid-ethyl acrylate copolymer and an opioid agonist, such as oxycodone, in combination with an opioid

antagonist, such as naltrexone (Pg. 1, sec. 0009, 0011, 0016; Pg. 2, sec. 0018; Pg. 10, sec. 0107; Pg. 13, sec. 0135, 0137; Pg. 14, sec. 0148). The controlled-release matrix can include at least one other release-modifying polymer, such as an alkyl cellulose, particularly ethyl cellulose, or a water insoluble ammonium methacrylate copolymer (Pg. 13, secs. 0136-0137; Pg. 14, secs. 0144-0145, 0149). The matrix can further include a plasticizer, a lubricant, a granulating aid, such as a bulking agent, and an agent which imparts resistance to active agent extraction by common solvents (Pg. 13, sec. 0140; Pg. 14, secs. 0146, 0151-0152). The controlled-release unit dose can be obtained by melt-extrusion, and formulated as multi-particulate dosage forms suited for once or twice a day dosing (Pg. 2, sec. 0024; Pg. 14, sec. 0149, 0153; Pg. 15, sec. 0156). Controlled-release unit doses containing oxycodone can be specifically formulated to exhibit desired *in vitro* oxycodone dissolution rates; as assessed by standard USP Paddle or Basket Methods at 100 rpm, 900 ml aqueous buffer, pH 1.2 or 1.6-7.2, and 37°C (Pg. 2, sec. 0023; Pg. 10, sec. 0105; Pg. 13, sec. 0135; Pg. 15, sec. 0162).

Ascertainment of the Difference Between the Scope of the Prior Art and the Claims (MPEP §2141.012)

Wright, IV *et al.* do not explicitly disclose that a controlled-release formulation having a rubbery matrix comprising a neutral poly(ethyl acrylate, methyl methacrylate) copolymer, oxycodone, and naltrexone can be suitable for once or twice a day dosing; can exhibit the specific *in vitro* oxycodone dissolution rates desired; as assessed by standard USP Paddle or Basket Methods at 100 rpm, 900 ml aqueous buffer, pH 1.2 or 1.6-7.2, and 37°C; and can deliver the peak plasma level of oxycodone *in vivo* at 2-17

hours after administration of the dosage form. These deficiencies are cured by the teachings of Oshlack *et al.* (U.S. Patent No. 5,958,452) and Oshlack *et al.* (U.S. Patent Application Pub. No. 2002/0010127)

Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)

It would have been *prima facie* obvious for one of ordinary skill in the art at the time of the present invention to combine the respective teachings of Wright, IV *et al.*, Oshlack *et al.* (U.S. Patent No. 5,958,452) and Oshlack *et al.* (U.S. Patent Application Pub. No. 2002/0010127) as described *supra* to deduce applicants claimed invention.

Oshlack *et al.* (U.S. Patent No. 5,958,452) and Oshlack *et al.* (U.S. Patent Application Pub. No. 2002/0010127) disclose, as described *supra*, that a controlled-release matrix formulation comprising any pharmaceutically acceptable acrylate-methacrylate copolymer, ethylcellulose, oxycodone and naltrexone, in the weight percentages claimed, can be suitable for once or twice a day dosing; can exhibit the specific *in vitro* oxycodone dissolution rates desired, as assessed by standard USP Paddle or Basket Methods at 100 rpm, 900 ml aqueous buffer, pH 1.2 or 1.6-7.2, and 37°C; and can deliver the peak plasma level of oxycodone *in vivo* at 2-17 hours after administration of the dosage form. Since Wright, IV *et al.* disclose that a controlled-release formulation comprising melt-extruded multi-particulates or granulates having a rubbery matrix comprises a neutral poly(ethyl acrylate, methyl methacrylate) copolymer, ethyl cellulose, oxycodone, and naltrexone; one of ordinary skill in the art would be motivated to employ the Wright, IV *et al.* formula for a controlled-release unit dose

matrix; wherein Eudragit NE 30 D, the neutral poly(ethyl acrylate, methyl methacrylate) copolymer, is admixed with ethylcellulose, oxycodone and naltrexone in the specified weight percentages; with the reasonable expectation that the resulting controlled-release unit dose will be suitable for once or twice a day dosing; can exhibit the specific *in vitro* oxycodone dissolution rates desired, as assessed by standard USP Paddle or Basket Methods at 100 rpm, 900 ml aqueous buffer, pH 1.2 or 1.6-7.2, and 37°C; and can deliver the peak plasma level of oxycodone *in vivo* at 2-17 hours after administration of the dosage form.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicants' arguments filed September 19, 2011 have been fully considered but they are not persuasive.

i) Applicants contend that "Wright does not disclose the formulation according to the present invention comprising melt extruded multiparticulates which comprise a rubbery matrix including a neutral poly(ethyl acrylate, methyl methacrylate) copolymer,

and an active agent"; that Wright makes "no mention of melt extrusion"; and that "it should be understood that paragraph [094] of Wright refers to the preparation of the first and second compound for the coating process".

Respectfully, however, the Examiner cannot agree. Wright explicitly discloses a specific embodiment in which a therapeutic agent is formulated in a controlled release matrix containing *a*) a combination of alkylcellulose (e.g. ethylcellulose) <u>and acrylic</u> resins (e.g. methacrylic acid copolymers) (see paragraphs 0084-0085); and *b*) a plasticizer (see paragraph 0086), which would impart a rubbery consistency to the material (see, for example, the description in the latter half of paragraph 0074). The specific list of example acrylic resins in paragraph 0089, which includes EUDRAGIT NE 30 D, a particular neutral poly(ethyl acrylate, methyl methacrylate) copolymer, is so short as to be anticipatory. Example 1 also specifically incorporates a EUDRAGIT copolymer, and although the EUDRAGIT copolymer featured in Example 1 is not EUDRAGIT NE 30 D, one of ordinary skill would readily envisage Applicants' claimed composition in which EUDRAGIT NE 30 D is instead the copolymer. Such a scenario is not a "picking and choosing" of unrelated teachings, but is based on the directly related short list of example EUDRAGIT copolymers of paragraph 0089.

Contrary to Applicants' assertion, Wright does explicitly mention, in paragraph 0094, that solid multi-particulates can be prepared by *melt extrusion*. In a specific embodiment, these solids can exhibit sustained-release, and can comprise the very same materials disclosed in Section 5.4.4. Within section 5.4.4., Wright discloses the specific embodiment discussed *supra* in which a therapeutic agent is formulated in a

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controlled release matrix containing *a*) a combination of alkylcellulose (e.g. ethylcellulose) <u>and acrylic resins</u> (e.g. methacrylic acid copolymers) (see paragraphs 0084-0085); and *b*) a plasticizer (see paragraph 0086), which would impart a rubbery consistency to the material (see, for example, the description in the latter half of paragraph 0074). It would thus follow that these controlled-release matrices can be prepared by melt extrusion. The fact that these solids are being prepared for a subsequent coating process is irrelevant. Indeed, Applicants claims do not exclude a coating on their various dosage forms.

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ii) Applicants contend that "it is not obvious to use the teachings of Wright to thwart the physical acts of tampering (e.g. grinder/crushing), also it is not obvious from Wright alone to use any neutral poly(ethyl acrylate, methyl methacrylate) copolymer, including Eudragit NE 30 D, in a controlled release matrix to prevent tampering"; and, moreover, that "Wright seeks to obtain a totally different kind of tamper resistance" than Applicant describes in their specification.

The Examiner, however, would in the first instance like to note that the features of tamper resistance Applicant references are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Further, the 103 rejection of record has rendered obvious Applicants' claimed invention; and the fact that Applicants have recognized another advantage which would flow naturally from following the suggestion of the prior

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art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

For the foregoing reasons, and the reasons already of record, the 35 USC 102(b) rejection of claims 138-140, 142-144, 151, 153, 165-170, 177, 179, 211-216, 223, 225, 236-241, 248, and 250; and the 35 USC 103(a) rejection of claims 138-140, 142-162, 164-189 and 211-260; are hereby maintained.

Conclusion

No claims are allowed.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID BROWE whose telephone number is (571)270-1320. The examiner can normally be reached on Monday-Friday 8:30AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fereydoun Sajjadi can be reached on 571-272-3311. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DAVID M. BROWE Patent Examiner, Art Unit 1617

/Carlos A. Azpuru/ Primary Examiner, Art Unit 1617